

**I. AMENDMENTS TO THE CLAIMS:**

Kindly amend claims 1-3, 6 and 7 as follows.

The present listing of claims replaces all prior listings or versions of claims in the above-captioned application.

**LISTING OF CLAIMS:**

1. (Currently Amended) A corrosion-resistant metal made sensor for measuring mass flow rate and pressure of fluid, comprising:

(a) a mass flow rate sensor part comprising

- i. a corrosion-resistant metal substrate; and
- ii. a thin film forming a temperature sensor and a heater installed on a back face side of a fluid contacting surface of the corrosion-resistant substrate; and

(b) a pressure sensor part comprising a thin film forming a strainstain sensor element installed on the back face side of the fluid contacting surface of the corrosion-resistant metal substrate.

2. (Currently Amended) A corrosion-resistant metal made sensor as claimed in Claim 1, wherein the corrosion-resistant metal substrate is fitted into a mounting groove of a corrosion-resistant metal made sensor base sosuch that the fluid contacting surface is exposed outwardly, and a peripheral edge of the corrosion-resistant metal substrate is hermetically welded to the sensor base.

3. (Currently Amended) A corrosion-resistant metal made sensor as claimed in Claim 1, wherein output drift ~~to pressure~~ of the mass flow rate sensor part due to pressure changes of fluid is corrected by output of the pressure sensor part.

4. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 1, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

5. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 1 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

6. (Currently Amended) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 2, wherein the sensor base is positioned inside a fluid passage of a body equipped with the fluid passage that communicates between a flow-in inlet for fluid and a flow-out outlet for the fluid by installing a metal gasket in order that hermeticity between the body and the sensor base is held by thrusting by the metal gasket through mediation of the sensor base, and at the same time stiffness of a structural component disposed directly above the metal gasket ~~to~~ relatively raises hermeticity between the body and the sensor base, thus suppressing strain of the mass flow rate sensor part and the pressure sensor part caused by thrusting by the metal gasket.

7. (Currently Amended) A corrosion-resistant metal made sensor as claimed in Claim 2, wherein output drift ~~to pressure~~ of the mass flow rate sensor part due to pressure changes of fluid is corrected by output of the pressure sensor part.

8. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 7, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

9. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 2, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

10. (Previously Presented) A corrosion-resistant metal made sensor as claimed in Claim 3, wherein the thin film includes an insulation film formed on the back side of the fluid contacting surface of the corrosion-resistant metal substrate, a metal film that forms the temperature sensor, the heater and a strain sensor element, and a protection film covering the insulating film and the metal film.

11. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 2 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

12. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 3 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.

13. (Previously Presented) A fluid supply device that employs the corrosion-resistant metal made sensor according to Claim 4 mounted on a fluid controller in order that flow rate and pressure of fluid is appropriately checked at a time of fluid control.